

Notice of Allowability

Application No.

09/887,738

Examiner

Terrence R. Till

Applicant(s)

ROTHENBERGER, HELMUT

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 10/16/2003.
2. ☒ The allowed claim(s) is/are 21-43.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**


7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☒ including changes required by the proposed drawing correction filed 23 December 2002, which has been approved by the Examiner.
 - (c) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>20031201</u> |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |


Terrence R. Till
Primary Examiner
Art Unit: 1744

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with J. Crawford on 12/1/2003.

The application has been amended as follows:

In the specification:

On page 4, line 18, after "alternate.", --The spring shaft having a coupling 100 attached to an end for connection to a tool.-- has been inserted.

2. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: In figure 1, applicant will provide a box representation of the coupling. The coupling is a conventional feature of these types of apparatus. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

3. The following is an examiner's statement of reasons for allowance: The prior art does not disclose nor render obvious the claimed combination of an apparatus comprising a rotating coil spring forming a spring shaft rotated by drive jaws of a driving machine, said rotating coil spring shaft having a coupling at an end for connecting a tool selected from the group consisting of drills, cutterheads, thrashing chains heads, pipe brushes, root cutters and mud drills and having windings of spring steel forming said rotating coil spring shaft and having a rotation axis and a coiled winding axis, the windings having at least on their exterior a cross section different from

the circular shape, wherein at least the exterior of the windings is profiled such that said spring shaft acts by rotation and a screw guidance in the pipe with at least one sharp edge scrapingly on contamination of the pipe walls. Additionally, the prior art does not disclose nor render obvious the claimed combination of a method of removing contamination on an inner pipe wall comprising inserting an apparatus into a pipe lumen having contamination on an inner pipe wall, said apparatus comprising a coil spring forming a spring shaft with windings of spring steel and with a rotation axis and a coiled winding axis, wherein the windings having at least on their exterior a cross section different from the circular shape and the exterior of the windings, and rotating said coil spring such that said spring shaft acts with at least one edge scrapingly with the inner pipe wall to remove contamination from the inner pipe wall. Further, the prior art does not disclose nor render obvious the claimed combination of a method of removing contamination on an inner pipe wall comprising inserting an apparatus of claim 21 into a pipe lumen having contamination on an inner pipe wall, said apparatus comprising a coil spring forming a spring shaft with windings of spring steel and with a rotation axis and a coiled winding axis, wherein the windings having at least on their exterior a cross section different from the circular shape and the exterior of the windings, and rotating said coil spring such that said spring shaft acts with at least one edge scrapingly with the inner pipe wall to remove contamination from the inner pipe wall.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Till whose telephone number is (703) 308-1592.

Any inquiry of a general nature concerning the status of this application should be directed to the receptionist of Technology Center 2 whose telephone number is (703) 308-0661.

Any responses made by facsimile should be addressed to T. Till at (703) 872-9310.

In mid-December of 2003, the examiner will be moving locations and changing phone numbers. The following information will apply:

New phone number: (571) 272-1280


TERRENCE R. TILL
PRIMARY EXAMINER
ART UNIT 1744

trt
December 1, 2003